

Development of the ISS NORS

This paper will discuss the design and development of the Nitrogen Oxygen Recharge System (NORS) for the International Space Station (ISS). The emphasis of the paper is the collaborative effort between The Boeing Company and Cobham in the crafting of the architecture of the system to meet NASA's requirements. Specific examples to be discussed include the inclusion of the pneumatic isolation valve for compliance with safety requirement, the inclusion of a single stage regulator with flow limiter versus a two-stage regulator, and the use of integrated assemblies as opposed to separate valves/regulators. The paper will also discuss NORS experience with integrated assemblies (common body) versus prior ISS hardware and Cobham trade study efforts, to include lessons learned and potential applications to future programs.